R E P O R T R E S U M E S

ED 015 230 08 UD 005 023

THE DEVELOPMENT OF PRE-VOCATIONAL EDUCATION LITERACY COURSES FOR USE WITH COMPUTER ASSISTED INSTRUCTION OF DISADVANTAGED YOUTH AND ADULTS. TECHNICAL PROGRESS REPORT.

BY- HANKIN, EDWARD K. AND OTHERS
FLORIDA ST. UNIV., TALLAHASSEE

REPORT NUMBER BR-6-1458-PR-1 PUB DATE 15 SEP 66
GRANT OEG-2-6-001458-1540
EDRS PRICE MF-$0.25 HC-$0.28 5P.

DESCRIPTORS- *PREVOCATIONAL EDUCATION, *COMPUTER ASSISTED INSTRUCTION, *DISADVANTAGED YOUTH, PROGRAMED MATERIALS, READING INSTRUCTION, ARITHMETIC, LITERACY EDUCATION, ILLITERATE ADULTS, RETARDED CHILDREN,

THIS TECHNICAL PROGRESS REPORT COVERS THE FIRST THREE MONTHS OF A PROJECT TO DEVELOP COMPUTER ASSISTED PREVOCATIONAL READING AND ARITHMETIC COURSES FOR DISADVANTAGED YOUTHS AND ADULTS. DURING THE FIRST MONTH OF OPERATION, PROJECT PERSONNEL CONCENTRATED ON SUCH ADMINISTRATIVE MATTERS AS TRAINING STAFF AND PREPARING FACILITIES. AN ARITHMETIC PROGRAM WAS SUBSEQUENTLY WRITTEN TO TEACH COUNTING AND NUMBER READING, AND WAS ADMINISTERED TO 12 SUBJECTS WITH LOW ARITHMETIC ABILITY FROM A VOCATIONAL TRAINING PROJECT. DESPITE INITIAL UNCERTAINTIES ABOUT USING THE COMPUTER, THESE SUBJECTS HAD GENERALLY POSITIVE ATTITUDES ABOUT THEIR EXPERIENCE. WHEN THE PROGRAM WAS TRIED WITH NORMAL CHILDREN, MENTALLY RETARDED CHILDREN, AND UNDERGRADUATE STUDENTS, THE RETARDED CHILDREN FOUND THE COURSE TOO DIFFICULT. DURING THE NEXT REPORTING PERIOD A GENERAL PROGRAM TO TEACH ADDITION WILL BE WRITTEN. FOR THE READING COURSE, SKILLS NECESSARY FOR THE VARIOUS READABILITY LEVELS HAVE BEEN OUTLINED AND PROGRAM OBJECTIVES HAVE BEEN CONSTRUCTED IN BEHAVIORAL TERMS. THE COURSE CONTAINS CONTENT AREAS AND MATERIALS OF HIGH INTEREST TO LEARNERS AND APPROPRIATE TO THEIR GENERAL KNOWLEDGE LEVEL. THE 40 EXERCISES AT EACH LEVEL WILL DEVELOP PREVOCATIONAL CONCEPTS AND ATTITUDES. AMONG THE ALREADY COMPLETED MATERIALS ARE LINEAR AND BRANCHING SUBSEQUENCES. ALTHOUGH AT PRESENT ONLY ABOUT HALF THE MATERIAL HAS BEEN WRITTEN FOR READABILITY LEVEL TWO, BY THE NEXT REPORTING PERIOD IT WILL BE COMPLETED, AND PART OF LEVEL THREE WILL BE FINISHED AND GIVEN TRIAL RUNS. (LB)

ED015230

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

5023

TECHNICAL PROGRESS REPORT

Grant No. OEG-2-6-001458-1540

Project Title:

The Development of Pre-Vocational Education Literacy Courses For Use With Computer Assisted Instruction of Disadvantaged Youth and Adults

Report Submitted by:

Florida State University
Tallahassee, Florida 32306

Principal Investigators:

Edward K. Hankin

Edward K. Hankin, Professor of Education

Edwin H. Smith

Edwin H. Smith, Associate Professor of Education

Timothy A. Smith

Timothy A. Smith, Assistant Professor of Psychology

Administrative Grants Officer:

Russell J. Keirs

Russell J. Keirs, Associate Dean, Graduate School

Reporting Period: June 1, 1966-August 31, 1966

Date of Report: September 15, 1966

UD 005023

Introduction

During the first month of this period, E. Hankin with a cadre staff, prepared for the project tasks and activities. The University acquired and furnished an air-conditioned facility for those staff members concerned with the verbal and audio-visual aspects of the project. Dr. T. Smith and others working on the arithmetic aspects of the project were quartered in the Psychology building. Both facilities are readily accessible to the Center for Computer Assisted Instruction which is the location of the computer and terminals.

Most of the remaining positions listed in the proposal were filled beginning July 1. Principal investigators T. Smith and E. Smith also began their work on this project at that time. Dr. Miles Ritchie, whose specialty is the audio-visual aspect of this project, was to begin working one-quarter time beginning July 1, but was unable to do so because of an eye injury which occurred early in June. He was hospitalized for surgery and was unable to work on the project until the first of September. The staff has written around his materials. Now that he is actively working on the project, the audio-visuals will be integrated with the materials already written.

Largely because of the very short notice of the funding of this project, resulting in insufficient screening of applicants, one secretary and one graduate assistant were employed starting in July, but were found to be unsatisfactory for the tasks of the project. In addition, one writer and one graduate assistant were employed only for the months of July and August so that the work of the project could be started. Other qualified persons who could accept long-term appointments were not available for work during those months. Satisfactory long-term replacements have been secured for these four positions, beginning September 1 or before.

All staff members have received specialized training with respect to the tasks of the project beginning with their employment. Training continues, as needed, to maintain the staff at optimum performance levels. Their progress, plans, and problems are stated in the balance of this report. Within each section, the report for the arithmetic courses is separated from the report for the reading courses. For the present, the work on these two aspects of the project is being done somewhat independently. After sufficient materials have been developed in these two aspects they will be appropriately coordinated and integrated.

I. Major Activities of This Reporting Period.

A. Arithmetic Course

Literature in the area of arithmetic and programmed instruction was reviewed and a written summary prepared. A program was written to teach counting. Number reading and counting various numbers of objects were the skills tested for and developed. The program was entered into the computer and de-bugged. It was then administered to twelve subjects from a Vocational Training project at Florida A & M University who had low arithmetic ability. Only one subject required supplementary instruction in the material covered, showing that the material was appropriate for this kind of learner. These subjects, in general, came through this trial run with a very positive attitude to Computer Assisted Instruction. Initially they were uncertain about the experience and somewhat afraid of the machine, but this was quickly overcome. The program was also tried with other subjects including undergraduate students, normal children, and mentally retarded children. The mentally retarded children found the course very difficult and made no progress. The other learners were quite successful with the learning tasks. The counting program, when listed by the computer, required 37 pages.

B. Reading Course

The reading skills for each of the readability levels were outlined and objectives for implementing these skills were drawn up in behavioral terms. Content areas appropriate to the general knowledge levels of the learners were chosen.

Forty exercises are being developed at each level to provide for the individual differences of the learners. Some original material is being written at appropriate levels and some uncopyrighted material has been reduced to the desired levels of readability. These materials are selected or written to be of high interest to the learners. The exercises serve to develop the pre-vocational concepts and attitudes which might be lacking in functionally illiterate youth.

At present, almost half of the material has been completed for readability level two. Some of this material is in the computer ready for try-out when the AV materials are prepared. The materials completed include linear and branching sub-sequences.

II. Activities Planned for Next Reporting Period.

A. Arithmetic Course

A general program to teach addition is to be written. This will include two-digit addition (7 + 5), addition of two-digit numbers (18 + 22) and the carrying of numbers.

B. Reading Course

Level two will be completed, given a preliminary tryout and debugged. It is also intended that part of level three will be finished and given trial runs. At present, the project appears to be on schedule and project personnel are optimistic regarding further progress.

III. Personnel Employed on the Project During Reporting Period.

Faculty: (Full time unless noted)

E. Hankin (one-quarter time)
A. Rivell
E. Smith (one-quarter time, 2 months)
T. Smith (2 months)

Program Writers:

Doris Alston (2 1/2 months)
Robert Ellis (one month)
Elizabeth Franks (half-time, 2 months)
Carol Geeslin (2 1/2 months)
Janice Miller (half-time, 2 months)
Carl Shaw (one week)

Graduate Assistants:

Henry Blaine II (1 1/2 months, half-time)
Russell Erdley (2 months, half-time)
Henry McDade (2 months, half-time)

Secretaries:

Vicki Boatwright (two weeks)
Margaret Dalton (three weeks)
Lois Jones

SUMMARY OF

TECHNICAL PROGRESS REPORT

Submitted by: Florida State University

Date: September 15, 1966 Reporting Period: June 1, 1966 to August 31, 1966

Principal Investigators: E. Hankin, E. Smith, T. Smith

Project Title: The Development of Pre-Vocational Education Literacy Courses For Use With Computer Assisted Instruction of Disadvantaged Youths and Adults

Grant No: EOG-2-6-001458-1540 Project No: 6-1458

Introduction: This report covers the first three months operation of the project. The first month a cadre staff largely concentrated on administrative matters such as preparing facilities and staffing. Most staff members started working on the tasks of the project on or after the beginning of the second month. Partly because of short notice of funding, some difficulty was experienced in securing the services of qualified staff. Where needed, staff was trained in computer coursewriting and other aspects of their assigned tasks. Initially, arithmetic coursewriting is being done independently of reading coursewriting.

I. Major Activities of This Reporting Period. [A. Arithmetic Course] A program was written to teach counting, including number reading. This was entered in computer, de-bugged, and administered to twelve subjects with low arithmetic ability from a vocational training project. Only one subject required supplementary instruction. Subjects developed a very positive attitude toward Computer Assisted Instruction, despite initial uncertainties. The program was also tried with other groups of subjects, including mentally retarded children who found the course too difficult. The counting program, listed by the computer, required 37 pages. [B. Reading Course] Reading skills at the several levels were outlined and behavioral objectives constructed. Content areas were appropriate to general knowledge levels of the learners. Forty exercises are being developed at each level. Materials are written to be of high interest to learners. Exercises serve to develop the pre-vocational concepts and attitudes which might be lacking. About half of the material has been completed for readability level two. This is in the computer ready for tryout when AV materials are completed. Materials include linear and branching subsequences.

II. Activities Planned for The Next Reporting Period. [A. Arithmetic Course] A program to teach addition will be written, including two-digit additions, additions of two-digit numbers and carrying of numbers. [B. Reading Course] Level 2 will be completed, tested, and de-bugged. Audio-visual materials will be incorporated. Part of level 3 will also be written and given trial runs.

III. Personnel Employed On The Project During Reporting Period.
(Some part time and some for portions of the period)

Faculty: Four persons
Program Writers: Six persons
Graduate Assistants: Three persons
Secretaries: Three persons